OPHTHALMOLOGY.

UNDER THE CHARGE OF

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Theory of Accommodation.—PRIESTLEY SMITH (Birmingham) seeks to reconcile the observations of Tscherning with the theory of Helmholtz. Tscherning found that during accommodation the anterior surface of the lens does not, as Helmholtz supposed, become more globular, but that it changes to a hyperboloid curve—becomes more curved at the centre of the pupil and flatter at the margin. This, he contended, could only be caused by tightening of the zonule, supplemented by internal resistance at the pole of the lens. On the other hand, the experiments of Hess confirm Helmholtz's view that the zonule is relaxed during accommodation. Priestley Smith shows that the changes noticed by Tscherning can be produced by relaxation of the zonule, if the elastic resistance of the lens is supposed to be least at the anterior pole of the lens and to increase toward the equator.—*Ophthalmic Review*, November, 1898.

Influence of Accommodation on Intra-ocular Pressure.—C. HESS and L. HEINE (Marburg) have made experiments to ascertain what changes of intra-ocular pressure might be produced by the act of accommodation. They found that in the eye of an ape a change could be produced by eserin or faradism amounting to 10 or 12 D. of accommodation. The animal being anæsthetized, and the intraocular muscles divided so as to prevent any external pressure being brought to bear on the globe, the interior of the eye was connected with a manometer so delicate that it indicated the changes of intra-ocular pressure due to every pulsation of the vessels. Different observers noted the changes produced by faradism in the anterior lens reflex, in the refraction of the eye by skiascopy, and in the manometer. No effect was produced on the intra-ocular pressure by the strongest accommodation.—*Graefe's Archives f. Ophthalmol*, vol. xlvi. pt. 2.

[This observation is of importance, because it negatives the assumption that accommodation causes increase of intra-ocular tension, which has been made the basis of an argument against the correction of myopia. The argument has been proved fallacious, both by theoretical reasoning and clinical experience; but, having the support of the older authorities, it still influences the practice of some ophthalmologists. The theory that glaucoma was caused by excessive accommodation has also had acceptance among few, in spite of the well-known influence of eserin (which causes most violent spasm of accommodation) in relieving glaucoma. It, too, loses a large part of its slender foundation through these observations.—ED.]

Accommodation in the Lower Animals.—J. W. BARRETT (Melbourne), under the title "Do Animals Accommodate?" reports that he was unable to detect, with the shadow test, any evidence of accommodation in the eyes of mammals except in those of monkeys. He examined a good many species of wild and domestic animals, and concludes that it is probable that the accommodation apparatus is rudimentary or absent in mammals with the exception of man and monkeys.—*Ophthalmic Review*, September, 1898.

T. BEER has made a very complete study of accommodation in the eyes of the lower animals. He finds that among the cephalopods and some fishes the refraction is highly myopic, but that there is a power of negative accommodation, by moving the lens back toward the retina, which enables them to focus even parallel rays of the retina. In the higher vertebrates the refraction of the eye adapts it for more distant vision, and the power of accommodation assists to see clearly nearer objects. In the anphieia and reptiles the lens, unchanged in shape, is dragged forward from the retina in accommodating. In the higher vertebrates accommodation is effected by rendering the crystalline lens more convex through relaxation of its suspensory ligament. The greatest range of accommodation is found in the eyes of a few truly amphibious animals, as the terrapin, and is sufficient to give them clear vision either in air or water. Among the lower mammals the power of accommodation is generally much less than in man. It is especially deficient among the rodents, and Beer failed to discover any in the eyes of the hare or the rabbit.—*Wiener klin. Woch.*, October 20, 1898; and *Ophthalmic Review*, September, 1898.

PRIESTLEY SMITH succeeded in producing an accommodation change in the freshly excised eye of the rabbit amounting to 4 D.; and he has seen with the shadow test the refraction change in the living eye of the rabbit from approximate emmetropia to considerable myopia.—*Ophthalmic Review*, October, 1898.

Holocain for Corneal Ulcers.—H. DERBY (Boston) having noticed that when used as an anæsthetic holocain did not affect unfavorably the corneal epithelium, as did cocain, was led, on account of its bactericidal properties, to employ a 1 per cent. solution of it in the treatment of corneal ulcers. The results obtained were uniformly favorable. Pain was promptly relieved, and healing appeared to be hastened by the application of the drug. Derby reports cases of serpent ulcers, corneal ulceration with purulent conjunctivitis, and painful and recurring ulcers which were all favorably influenced by this treatment. While the series of cases is too small to establish the value of holocain in this direction, it justifies a further careful trial of the drug.—*Archives of Ophthalmol*, January, 1899.

Treatment of Scleritis and Episcleritis.—DR. GRANDCLEMENT (Lyons) recognizes two forms of scleritis, a more superficial episcleritis, and a deeper, which he terms sclero-choroiditis anterior. For eight years he has treated cases of both kinds with subconjunctival injections of the solution of cyanide of mercury into or near the wine-colored spot of hyperæmia. Generally three or four injections bring about a cure of the deep-seated lesions. In episcleritis the benefit of this treatment is a little less rapid and less striking, but an equally good result is attained in a little longer time. The more marked influence of the treatment in the deeper seated lesions Grandclement would associate with what he believes to be the beneficial influence of the same treatment in disease of the uveal tract.—*La Clinique Ophthalmol.*, 1899, No. 3.

Reclination of the Lens.—E. VALUDE (Paris) reports a case in which one eye, operated on for senile cataract, was lost by expulsive hemorrhage, and the patient, aged seventy-three years, was anxious to have the other eye operated on. Fearing hemorrhage if he did extraction, he resorted to the operation of "couching" the lens. Through a small incision in the sclera behind the ciliary region he introduced a small curette, with which the lens was depressed, and held a few seconds in its new position. It showed no tendency to rise again behind the pupil. Vision of 1/3 was obtained, and the condition of the eye continued excellent a month and a half later.—*Annales de l'Oculistique*, January, 1899.

DERMATOLOGY.

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Resorcin-alcohol in the Treatment of Seborrhœic Eczema of the Face.—A. C. FRICKENHAUS (*Monatshefte f. prakt Derm.*, June 1, 1899) recommends rubbing small patches of this disease once with a 25 per cent. solution, and then in a few days with a 10 per cent. solution. At night the skin may be anointed with a cold-cream ointment. In eight days cure usually results. In stubborn cases of eczema of the nose the author has used a 50 per cent. solution with excellent effect. The application is also recommended for tinea versicolor.

[Inasmuch as authors and observers are not all in accord on the subject of so-called seborrhœic eczema, the remedy suggested should be used at first with caution, lest it prove irritating.—ED.]

Case of Acute Disseminated Miliary Tuberculosis of the Skin.—PELAGATTI (*Giorn. Ital. d. Mal. Ven. e d. Pelle*, 1898, and *British Journal of Dermatology*, July, 1899) records a case occurring in a child, aged two years, the cutaneous disease appearing after measles, along with acute tuberculosis of the lungs and intestines. The eruption consisted of hemispherical papules the size of hemp-seeds or rather larger, of a yellowish-red color, without